Submanifold Geometry, Lie Group Action and Its Applications to Theoretical Physics 2025

Date : November 22 - 24, 2025

Place : Osaka Metropolitan University, Sugimoto Campus, Building E, Room E408

Program

November 22

- 9:55 - 10:00 Opening Ceremony
- 10:00 - 11:00

  Speaker: Xiaobo Liu (Peking University)

  Title: Mean Curvature Flow for Isoparametric Submanifolds in Hyperbolic Spaces
- 11:15 - 12:15

  Speaker: Kurando Baba (Tokyo University of Science)

  Title: On Backward Mean Curvature Flow for Equifocal Submanifolds in Symmetric Spaces of Compact Type

Lunch

- 14:00 - 15:00

  Speaker: Yuichiro Sato (Waseda University)

  Title: Construction of higher-dimensional vacuum solutions using almost abelian Lie groups
- 15:15 - 16:15

  Speaker: Yuuki Sasaki (Utsunomiya University)

  Title: Maximal antipodal sets of exceptional symmetric spaces
- 16:30 – 17:30

  Speaker: Osamu Ikawa (Kyoto Institute of Technology)

  Title: The intersection of two real flag manifolds in a complex flag Manifolds – An application of a canonical form of a compact symmetric triads -

November 23

- 10:00 - 11:00

  Speaker: A Juncheol Pyo (Pusan National Univeristy)

  Title: Translating Solitons for the Mean Curvature Flow

- 11:15 - 12:15

  Speaker: Tomoki Fujii (Tokyo University of Science)

  Title: Shapes of graphical solitons for the mean curvature flow invariant under hyperpolar actions

Lunch

- 14:00 - 15:00

  Speaker: Yuta Yamauchi (Yokohama National University)

  Title: The total absolute curvature of submanifolds with singularities

- 15:15 - 16:15

  Speaker: Shota Hamanaka (Osaka University)

  Title: Covergence rate of geometric flows on weighted Riemannian manifolds

- 16:30 – 17:30

  Speaker: Isami Koga (Kyushu International University)

  Title: Equivariant harmonic maps of the quaternionic projective spaces into Grassmann manifolds

Banquet

November 24

- 10:00 - 11:00

  Speaker: Martin Guest (Waseda University & NCST)

  Title: A symplectic manifold arising in the theory of meromorphic connections (online talk)

- 11:15 - 12:15

  Speaker: Masahiro Morimoto (Tokyo Metropolitan University)

  Title: Affine differential geometry of parallel transport maps and weakly reflective submanifolds